Product Data Sheet

Product Name: MS-PPOH
Cat. No.: GC19483

Chemical Properties

Cas. No.	206052-02-0		
Chemical Name	N-(methylsulfonyl)-2-(2-propynyloxy)-benzenehexanamide		
SMILES	CCCOc1ccccc1CCCCCC(=O)NS(=O)(=O)C		
Formula	$C_{16}H_{21}NO_4S$	M.Wt	323.4
Solubility	DMF: 30 mg/ml,DMSO: 30 mg/ml,DMSO:PBS (pH 7.2)(1:2): .30 mg/ml,Ethanol: 25 mg/ml	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	MS-PPOH		

Background

Arachidonic acid is converted by microsomal CYP450 enzymes to a variety of epoxides, ω-1 and ω-hydroxylated compounds via what is known as the epoxidase pathway.[1],[2],[3] MS-PPOH is a selective inhibitor of the epoxygenation reactions catalyzed by specific CYP450 isozymes.[4]. MS-PPOH inhibits the formation of arachidonate 11,12-epoxides by CYP4A2 and CYP4A3 enzymes with an IC50 value of 13 µM, but has no effect on the formation of 20-HETE, the ω-hydroxylation product of CYP4A1.[5]

Reference:

[1]. Capdevila, J.H., Karara, A., Waxman, D.J., et al. Cytochrome P-450 enzyme-specific control of the regio- and enantiofacial selectivity of the microsomal arachidonic acid epoxygenase The Journal of Biological Chemisty 265, 10865-10871 (1990).
[2]. Sacerdoti, D., Abraham, N.G., McGiff, J.C., et al. Renal cytochrome P-450-dependent

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

metabolism of arachidonic acid in spontaneously hypertensive rats Biochemical Pharmacology 37, 521-527 (1988).
[3]. Fitzpatrick, F.A., and Murphy, R.C. Cytochrome P-450 metabolism of arachidonic acid: Formation and biological actions of “epoxygenase”-derived eicosanoids Pharmacol. Rev. 40(4), 229-241 (1989).
[4]. Imig, J.D., Falck, J.R., and Inscho, E.W. Contribution of cytochrome P450 epoxygenase and hydroxylase pathways to afferent arteriolar autoregulatory responsiveness British Journal of Pharmacology 127, 1399-1405 (1999).
[5]. Wang, M.H., Brand-Schieber, E., Zand, B.A., et al. Cytochrome P450-derived arachidonic acid metabolism in the rat kidney: Characterization of selective inhibitors Journal of Pharmacology and Experimental Therapeutics 284(3), 966-973 (1998).